

CLAIMS

1. A network device, comprising:

control logic configured to:

interface with a central office;

interface with a plurality of network access subscribers; and

interface with a wireless control unit.

2. The network device of claim 1, further comprising an optical port configured to enable the network device to communicate with a central office over an optical communications link.

3. The network device of claim 2, wherein the control logic is configured to interface with a central office by enabling the network device to communicate over a passive optical network.

4. The network device of claim 1, wherein the control logic is configured to interface with a plurality of network access subscribers by enabling the network device to operate as a digital subscriber line access multiplexer.

5. The network device of claim 1, further comprising at least one of an internal wireless antenna configured to receive and transmit wireless signals, and a port to enable the network device to be connected to an external wireless antenna.

6. The network device of claim 5, wherein said network device is configured to provide network access to wireless subscribers via at least one of said internal wireless antenna and said external wireless antenna.

7. The network device of claim 1, further comprising at least one of an infrared port to enable the network device to be interfaced via signals transmitted in an infrared portion of the spectrum, and an ultrasonic port to enable the network device to be interfaced via ultrasonic signals.

8. The network device of claim 1, further comprising a packet queue configured to store packets of data for transmission and a switch fabric configured to switch packets to the network access subscribers.

5 9. The network device of claim 1, wherein the control logic is further configured to enable the network device to communicate utilizing a first protocol with the central office, and to communicate utilizing a second protocol with the network access subscribers.

10 10. The network device of claim 9, wherein the first protocol is Ethernet, and wherein the second protocol is an xDSL (digital subscriber line) based technology.

11. The network device of claim 1, wherein the control logic is further configured to provide emergency services to the network access subscribers over the interface with the wireless control unit.

15 12. A control unit, comprising:
a wireless access port configured to transmit and receive wireless signals;
a processor containing logic configured to interrogate a network device; and
a memory containing data and instructions to enable the control unit to interrogate a
20 digital subscriber line access multiplexer (DSLAM) deployed in the physical plant.

13. The control unit of claim 12, further comprising DSLAM code to be uploaded to the DSLAM.

25 14. The control unit of claim 12, wherein the memory further comprises data and instructions to enable the control unit to interrogate an optical network unit (ONU) attached to a passive optical network in the physical plant.

30 15. The control unit of claim 12, wherein the wireless access port is configured to communicate with the DSLAM utilizing a first protocol, and wherein the wireless access port is

also configured to communicate utilizing a second protocol with a network device deployed elsewhere on a communications network.

5 16. The control unit of claim 15, wherein the second protocol is a cellular telephony protocol.

17. The control unit of claim 12, further comprising at least one of an infrared access port and an ultrasonic access port.

10 18. The control unit of claim 12, further comprising an infrared access port and an infrared access pole connectable to the infrared access port.

19. The control unit of claim 12, further comprising a security module configured to restrict access to the control unit.

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20. The control unit of claim 12, further comprising a display configured to present information to an user of the control unit, and an input configured to enable the user to enter instructions into the control unit.

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21. A network device configured to be deployed in the physical plant, comprising:
a power port configured to receive power from a central office over a subscriber loop connected between the network device and the central office, said network device being configured to communicate with the central office over the subscriber loop;

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an optical port configured to receive optical signals over at least one optical fiber connected between the network device and the central office, said network device being configured to communicate with the central office over the at least one optical fiber.

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22. The network device of claim 21, wherein the network device further comprises means for enabling the network device to interface with a plurality of digital subscriber line subscribers.

23. The network device of claim 21, wherein the network device further comprises means for enabling the network device to participate in a passive optical network provisioned over the at least one optical fiber.

- 5 24. The network device of claim 22, wherein the network device is further configured to communicate with the central office to enable the network device to at least one of provide emergency services to network subscribers, and participate in optical time domain reflectometry testing of the at least one optical fiber.